NORTH AMERICAN ENTOMOLOGICAL SOCIETIES AND THEIR PUBLICATIONS IN 1890 AND THE EARLY ENTOMOLOGICAL NEWS

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ABSTRACT: On the 100th anniversary of *Entomological News*, it is noteworthy that only four North American entomological journals have been published without interruption for a longer period. The *News* was intended for short papers and newsworthy items, such as reports of meetings of numerous societies, new literature citations, obituaries, reviews of basic entomology, economic entomology, and other related subjects. The new journal contained articles by most well-known entomologists of the day, and its circulation steadily increased.

Entomological News has been of service to entomologists since the first issue in 1890. Only four entomological journals in North America that have been published continuously are older. The 100th anniversary of the News provides an opportunity to review the state of entomology, especially its societies and journals, at the time the News was organized.

By 1890, the United States had experienced 40 years of unparalleled expansion. The western territories had been opened for settlement and the population had tripled (aided by 17 million immigrants) to 63 million (Hambidge, 1940), while railroads proliferated, accelerating the movement of agricultural products, manufactured items, and people. Two-thirds of the population was engaged in agricultural production (Hambidge, 1940), and crop losses caused by insects were frequent and often severe. Consequently, interest in scientific agriculture and entomology grew rapidly.

Entomological Societies

At the time Entomological News was initiated, there were six entomological societies in North America that produced serial journals (Table 1). Five of these were in the United States. All except the American Association of Economic Entomologists, and perhaps the Entomological Society of Canada, were organized and operated by amateur and professional entomologists who lived in the general area of their Society's headquarters. This is still the case today; only a few organizations are large enough to afford a central administrative staff for routine activities, and the travel costs for board members from distant points so they can meet regularly for policy decisions.

Most or all of the original entomological societies had some mem-

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bers from outside the immediate area, and some also had a small number of residents in other countries. Persons in these two groups were often referred to as "corresponding" members, to differentiate them from the local, "resident" members. It is interesting that at least some individuals were members of two or more societies well before the turn of the century, and that many occasionally attended meetings in distant cities. Such travel by train, for distances up to 200 or 300 miles, did not require more time than travel today does by air or car.

It is a little-known fact that the present Entomological Society of America, now the largest organization of entomologists in the hemisphere, had its beginnings in 1904, in Philadelphia. It was organized during joint meetings of the American Entomological Society, the related Feldman Collecting Social, and Entomological Section of the Academy of Natural Sciences of Philadelphia, together with the association of Economic Entomologists and the Entomological Club of the American

Association for the Advancement of Science (Allen, 1960).

The importance of Pennsylvania, particularly Philadelphia, in the early development of entomology in North America was recognized by Skinner (1911), who called this state "the cradle of entomology in America". He described the pioneering work in Pennsylvania by John Bartram in the mid-1700's; Thomas Say, F.V. and J.F. Melsheimer, and Titian Peale in the early 1800's; and E.T. Cresson, G.H. Horn, J.L. LeConte, and the American Entomological Society in the mid-1800's.

One feature that each of the early entomological societies had was a unique seal or emblem (Downey and Nelson, 1968). Nearly all included an insect, and were displayed on the covers of society publications. The American Entomological Society seal featured *Dynastes tityus* (L.), the very large "Hercules beetle", and the motto "*Festina lente*" (advance prudently).

Entomological Journals

At the time the first issue of *Entomological News* was published, there had been a total of ten entomological serials in North America, and five were still being printed (Table 2). This 50% survival rate is surprisingly high, considering that most societies did not have a large number of members and thus were not likely to have significant financial reserves, that all were operated by amateur publishers, and especially that this was done in "spare" time. Moreover, E.A. Schwarz (1891) stated that most American entomologists subscribe to few, if any, journals². Despite this

²Presumably they used society or local museum libraries. Important entomological contributions were also being made in the 19th century by the developing federal and state experiment stations, as well as by agricultural newspapers and organizations (see Barnes (1985) for additional information).

low level of support, he concluded that the six serials of the day (including *Entomological News*) compared favorably with the 19 then published in Europe, considering the much larger (4-fold) population there, and the lower printing costs on the Continent.

It is also noteworthy that of the five entomological journals extant when the *News* was begun, four are still being produced, 100 years later (Table 2). This is evidence of the continuing great importance of insects to agriculture and man, as well as the wise guidance and unselfish support by the leaders and members of the parent societies.

The Early Entomological News

In the first issue of *Entomological News* in 1890, E.M. Aaron outlined some of the objectives of the new journal. In addition to scientific papers, it was to include "Notes and News", "Queries and Answers", "Exchanges", "Doings of Societies", and "Entomological Literature". Many of these subjects had been missing from American entomological literature since the demise of the *Bulletin of the Brooklyn Entomological Society, Papilio*, and *Entomologica Americana*, according to Osborn (1937). The usefulness of these sections to the many subscribers who were not close to a major entomological library, and to amateur entomologists, must have been considerable.

Although these sections might be considered to be of minor importance today, I suggest that reading them (and the accompanying editorials) provides a much deeper understanding of the personalities and the atmosphere of entomology in the past than does a review of scientific

papers.

Aaron (1890) also indicated that the new journal would be enlarged and modified, as the subscribers desired. An obiturary section was added the first year, and steadily grew in size and scope. Although published articles provide a partial (though often scattered) record of the professional accomplishments of entomologists, it is an unfortunate fact that the lives of most entomologists are documented only after their death. Thus, obituaries are a prime source of information for historical studies, and this is evidenced by the large number of references to *Entomological News* obituaries in Wade (1928), Essig (1931), and Mallis (1971).

In the third year, an "Economic Entomology" section was added, under the editorship of John B. Smith of Rutgers. This was the second time that the American Entomological Society contributed to the literature on economic entomology, the first having been 27 years earlier, when *The Practical Entomologist* was initiated (see the article by Sheppard in this issue). This publication was the first serial published by an

entomological society in the Western Hemisphere to deal with economic

entomology.

It appears that the *News* was the first entomological periodical (Skinner, 1900) to publish a photograph by the then new "half-tone" process (January 1891). This was the first economical means of printing photographs; the cost was about 20% of reproducing line drawings by lithography. The first color *News* illustration, using the 3-color method, appeared in the April 1900 issue.

Many of the well-known entomologists of the day published in the *News*, from the first issue. Although several were local American Entomological Society members, such as Calvert, Cresson, Fox, Horn, and Skinner — most contributors were from other areas, including Ashmead, Blatchley, Beutenmuller, Blaisdell, Cockerell, Davis, Dyar, Edwards, Gillette, Holland, Jones, Lugger, Osborn, Slosson, Townsend, Weed, Van

Duzee, and Williston.

The editor (Skinner, 1891) emphasized his desire to provide material of interest to all subscribers, from amateurs and students to teachers, professors, and researchers. Short discourses (based on Comstock's and Packard's texts) on morphology, biology, classification, and other basic subjects were added, as well as insect poems, jokes, anecdotes from newspapers (some of which were obvious exaggerations), an insect identification service, and even articles with a philosophical or religious slant. This broad approach evidently was effective, for the *News*' circulation reached 550 copies before its 10th anniversary (Skinner 1898), and the size of each volume increased from 168 to 500 pages before its 20th year (Allen, 1960).

Entomological News has continued to thrive, despite competition from an increasing number of entomological and natural science publications. This success is the result of several factors, the most important of which are a long series of able and enthusiastic editors, the strong financial backing by the parent society, a willingness to evolve to suit changing conditions, and bequests by several committed society members. I trust that the News will still be an important part of American entomology

for the next 100 years!

Table 1. Chronology of Entomological Societies^a

No.	Founded	Society	Operating in 1890 ^C
1.	1859 ^b	American Entomological Society ("AES") (until 1866 known as Ent. Soc. of Philadelphia)	+
2.	1863	Entomological Society of Canada (1871-1949 known as Ent. Soc. of Ontario)	+
3.	1872	Brooklyn (N.Y.) Entomological Society	+
4.	1874	Cambridge (Mass.) Entomological Club	+
5.	1880	New York Entomological Club (predecessor of no.8; ceased operations in 1885)	
6.	1884	Entomological Society of Washington (D.C.)	
7.	1889	American Association of Economic Entomologists	+
8.	1892	New York Entomological Society	
9.	1901	Pacific Coast Entomological Society	
10.	1904	Hawaiian Entomological Society	
11.	1906	Entomological Society of America (also name of joint society formed by this society and no. 7 in 1953)	

^aThis list includes only organizations which published serial journals, and that were organized prior to 1908, fifty years after the AES was founded.

Some of the above data are from Sabrosky (1956), and all entries have been checked against this excellent reference.

^bErroneously listed as "1958" in Downey & Nelson (1968).

^cThe year that *Entomological News* was first published.

Table 2. Chronology of Serial Entomological Journals

No.	Date ^a	Journal	Society	Longevity ranking ^c
1.	1861-	Transactions American Entomological Society (1861-67 as Proceedings Entomol. Soc. Philadelphia)	American Entomol. Society	1
2.	1865-67	Practical Entomologist	American Entomol. Society	-
3.	1868-	Canadian Entomologist	Entomological Soc. of Canada ^b	2
4.	1874-	Psyche	Cambridge (Mass.) Entomol. Club	3
5.	1878-85	Bulletin Brooklyn Entomol. Society (reinstated in 1912)	Brooklyn Entomol. Society	
6.	1881-85	Papilio (merged in 1885 with no. 8)	New York Entomol. Club	-
7.	1884-	Proceedings Entomol. Society Washington	Entomol. Soc. Wash.	4
8.	1885-90	Entomologica Americana (reinstated in 1926)	Brooklyn Entomol. Society	-
9.	1889- 1906	Proc. Amer. Assoc. Econ. Entomol. (succeeded by no. 14)	Amer. Assoc. of Econ. Entomologists	-
10.	1890-	Entomological News	Amer. Entomol. Soc.	5
11.	1893-	J. New York Entomol. Society	New York Entomol. Society	6
12.	1901-30	Proc. Pacific Coast Entomol. Society	Pacific Coast Entomol. Society	-
13.	1906-	Proceedings Hawaiian Entomol. Society	Hawaiian Entomol. Society	7
14.	1908-	Journal of Economic Entomol.	Amer. Assoc. Econ. Entomol., to 1952; Entomol. Soc. Amer., 1953-	8
15.	1908-	Annals Entomol. Soc. America	Entomol. Soc. Amer.	8

^aIf begun by 1908.

Some of the above data are from Sabrosky (1956), and all entries have been checked against this comprehensive reference.

^bBy Entomological Society of Ontario, 1871-1949.

^cIf published to present without interruption.

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³A number of references not cited in the text have been included here for those interested in additional reading. Most are older papers that contain unique information but have not been cited for many years.